WHAT IS CLAIMED IS:

1. A peritoneal dialysis catheter for insertion into the abdominal cavity of a patient for delivering and withdrawing fluid from a patient comprising:

a catheter body having a proximal portion, a distal tip portion, and a first longitudinally extending lumen configured to deliver fluid into the abdominal cavity;

first and second side openings formed in an outer wall of the distal portion of the catheter body adjacent the distal tip portion, the first and second side openings being in fluid communication with the first lumen and configured for passage of fluid therethrough; and

a stiffening insert positioned in the distal tip portion, the stiffening insert having a first stiffness greater than a second stiffness of the distal tip portion to facilitate entry in to the abdominal cavity, the stiffening insert having a lumen therethrough communicating with the first lumen.

2. The catheter of claim 1, wherein the catheter body is flexible and at least a distal section is adapted to form a coil shape within the abdominal cavity of a patient.

3. The catheter of claim 1, wherein the first and second side openings are positioned proximally of the stiffening insert.

4. The catheter of claim 2, wherein the distal tip portion has a bullet nose configuration.

5. The catheter of claim 3, wherein the distal tip portion includes an internal shoulder providing a stop for a stiffening member inserted through the first lumen of the catheter body.

6. The catheter of claim 1, further comprising a stiffening member removably positionable within the central lumen, the stiffening member mountable to the proximal portion of the catheter and terminating proximally of a distalmost tip of the catheter body, the stiffening member including a lumen for receiving a guidewire therethrough.

7. The catheter of claim 6, further comprising third and fourth side openings in the outer wall spaced axially from the first and second side openings.

8. The dialysis catheter of claim 6, wherein torquing the stiffening member places the catheter body in tension to stretch the catheter body, thereby reducing at least a portion of the outer diameter of the catheter body during insertion.

9. A catheter for delivering and withdrawing blood from a patient's body, the catheter comprising:

a catheter body having an outer wall, a distal portion, a lumen extending from a proximal portion of the catheter body to the distal portion and configured to receive a guidewire therein and to allow blood passage therethrough, the catheter body being flexible and having a distal section having a coil shape;

at least two side openings in the outer wall of the catheter body, each side opening being in fluid communication with the lumen; and

a stiffening member removably positionable within the lumen of the catheter, the stiffening member mountable to a proximal portion of the catheter and terminating proximally of a distalmost tip of the catheter body, the stiffening member including a lumen for receiving a guidewire therethrough.

10. The catheter of claim 9, wherein the stiffening member has a threaded portion on a proximal end portion for mounting the proximal end of the stiffening member to the catheter and for torquing the stiffening member to stretch the catheter body.

11. The catheter of claim 9, wherein the stiffening member has a threaded portion at its distal end portion for mounting the distal end portion to the catheter body.

12. The catheter of claim 9, wherein the stiffening member has an abutment tip for abutting a shoulder formed internally in the distal portion of the catheter body.

13. A system for placement of a dialysis catheter comprising a dilating trocar and a dialysis catheter having a coiled distal end section, the system comprising:

a) a trocar having a housing at a proximal end portion, an elongated tubular portion extending from the housing, and a lumen extending longitudinally through the housing and tubular portion, the tubular portion terminating in a blunt dissecting tip configured to dilate tissue and create a subcutaneous tissue tunnel, and the lumen having a first internal diameter and configured to removably receive a guidewire therethrough for over the wire insertion of the trocar; and

b) a dialysis catheter having a first longitudinally extending lumen and a plurality of side lumens in communication with the longitudinally extending lumen, at least a portion of the catheter having an outer diameter configured for insertion through the subcutaneous tissue tunnel and the longitudinally extending lumen configured to receive the guidewire for over the wire insertion of the dialysis catheter through the tissue tunnel when the trocar is removed, the distal section forming a coiled shape when the catheter is positioned within the body.

14. A method of inserting a peritoneal dialysis catheter into the abdominal cavity of a patient comprising:

inserting a guidewire and needle through a first incision into the abdominal cavity of a patient;

providing a trocar having a lumen and a dissecting tip;

inserting the trocar through a second incision in the patient and advancing the trocar towards the first incision to create a subcutaneous tissue tunnel;

threading the guidewire through the lumen of the trocar so the guidewire extends through the second incision;

removing the trocar;

providing a dialysis catheter having a lumen for passage of fluids; and

inserting the dialysis catheter over the guidewire through the second incision, through the subcutaneous tunnel and into the abdominal cavity.

15. The method of claim 14, further comprising the step of temporarily inserting a stiffening member in the lumen of the catheter to facilitate insertion of the catheter.

16. The method of claim 14, wherein the step of inserting the stiffening member includes the steps of twisting the stiffening member and securing the stiffening member to a proximal portion of the catheter to stretch the catheter to reduce at least a portion of the outside diameter of the catheter.

17. A method of inserting a peritoneal dialysis catheter over a guidewire into the abdominal cavity of a patient comprising:

inserting a guidewire through a first incision in a patient;

manipulating the guidewire to extend out of a second incision of the patient's body;

providing a peritoneal dialysis catheter having a lumen with a distal and proximal opening;

inserting the guidewire through the lumen and advancing the dialysis catheter over the guidewire through the second incision in the patient's body;

advancing the dialysis catheter subcutaneously over the guidewire and into the abdominal cavity; and

removing the guidewire leaving the dialysis catheter in place for a period of time.

18. The method of claim 17, further comprising the step of inserting a stiffening member through the lumen in the dialysis catheter to help advance the dialysis catheter to the desired site.

19. The method of claim 18, further comprising the step of inserting an introducer needle through the first incision for placement of the guidewire.